

UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

SLOAN VALVE COMPANY,)
a Delaware corporation,)
)
 Plaintiff,)
 v.)
)
ZURN INDUSTRIES, INC.,)
a Delaware corporation,)
)
 and)
)
ZURN INDUSTRIES, LLC,)
a Delaware limited liability company,)
)
 Defendants.)

Case No. 1:10-cv-00204

Judge: Hon. Amy J. St. Eve

Magistrate Judge: Hon. Sidney I.
Schenkier

**PLAINTIFF'S REPLY MEMORANDUM OF LAW IN SUPPORT OF ITS
MOTION FOR SUMMARY JUDGMENT**

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INTRODUCTION

Every one of Zurn's defenses to Sloan's claim of infringement rests in whole or in part on theories that were not disclosed in Zurn's final contentions or claim construction position.

Zurn's non-infringement theory is now based on its contentions that (1) the "horizontal axis of plunger travel" and "angled axis of plunger travel" claim limitations can only be met when the entirety of each travel path—after what Zurn now refers to as an initial "step function"—is a straight line; (2) in addition to being a straight line, the axis of plunger travel must "by itself, effectuate a full or reduced flush volume"; and (3) that Zurn's bushing is so "flexible" that it does not have a horizontal axis of plunger travel.

None of those arguments appears in Zurn's non-infringement contentions.

As to the first argument, Zurn stipulated at the August 28, 2012 *Markman* hearing in open court that only a portion of the plunger travel path needed to be straight. It did not state that that straight portion had to extend for any particular distance or cover any particular segment of the plunger travel path.

As to the second argument, Zurn never said anything in its claim construction papers, or at the *Markman* hearing, or in its non-infringement contentions that the "axis of plunger travel" must "by itself, effectuate a full or reduced flush volume," which it now contends. Zurn Br. at 9. In its pre-*Markman* non-infringement contentions, Zurn admitted that its accused devices met the "tilting of the handle in a first (second) direction moves the plunger along the first (second) axis of plunger travel providing a first (second) flush volume of water" claim limitations. Ex. 92 at 6.¹ Then, in its 2013 non-infringement contentions, Zurn took the position that the accused products did not have "axes of plunger travel" at all but admitted that tilting the handle

¹ All exhibits referenced herein refer to the Exhibits attached to the three (3) Declarations of Jason A. Berta that have accompanied each round of Sloan's summary judgment briefs.

nonetheless provided first and second flush volumes of water; Zurn made no mention of any contention that the claims required that the axis of plunger travel by itself, effectuate the different flush volumes. Ex. 93 at 9 (Dkt. 448).

As to the third argument, Zurn’s “flexible bushing” argument was also never disclosed in its non-infringement contentions and appeared for the first time during summary judgment briefing. *See* Sloan Resp.² at 8-9.

Zurn’s “shifting sands” approach does not stop with non-infringement. Each of Zurn’s three invalidity defenses—best mode, enablement, and written description—rest in whole or in part on contentions that were not disclosed in any of Zurn’s invalidity contentions. One of Zurn’s best mode arguments—that a 30% reduction in flush volume was the preferred percentage reduction in flush volume and was not disclosed in the *Wilson* patent—is not present in its best mode contentions. *See* Ex. 95 at 6-7 (Dkt. 447). One of Zurn’s enablement arguments—that the *Wilson* patent claims cover an invention that Sloan could not make because, according to Zurn, the Sloan Uppercut® does not exhibit a horizontal axis of plunger travel or an angled axis of plunger travel—is not present in its contentions. *See id.* at 4-6. The sole basis for Zurn’s written description argument—that the *Wilson* patent specification allegedly does not provide an adequate written description of how to achieve a horizontal axis of plunger travel and an angled axis of plunger travel—is not present in its final contentions. *Id.*

As if this were not enough, Zurn requests *in its summary judgment response brief* leave to amend its invalidity contentions to add anticipation and obviousness defenses against more than a dozen claims of the *Wilson* patent. Zurn Resp. at 35.

² “Sloan Resp.” and “Zurn Resp.” reference the parties’ respective response summary judgment briefs filed on July 25, 2013. “Sloan Br.” and “Zurn Br.” reference the parties’ respective opening summary judgment briefs filed on June 10, 2013.

As demonstrated below, each of these new contentions fails on its merits. But each should also be rejected because of Zurn's failures to comply with the local patent rules.^{3 4}

I. SLOAN IS ENTITLED TO SUMMARY JUDGMENT ON INFRINGEMENT

Zurn argues its products do not infringe because the plunger in Zurn's accused devices does not slide along either a "horizontal axis of plunger travel" or an "angled axis of plunger travel." The premise of this argument is Zurn's current contention that these claim limitations can only be met when the entirety of both plunger travel paths—after an initial "step function"—is a straight line. That, Zurn argues, is not present in the accused devices—nor even in the invention described in the *Wilson* patent itself! Zurn's enablement argument undermines the erroneous claim construction position that Zurn advocates. According to Zurn, if its construction of "axis of plunger travel" is applied to the *Wilson* patent, then by Zurn's own admission the *Wilson* patent specification would fail to describe what Zurn contends the claims require. As Sloan as repeatedly explained in its summary judgment papers, such a claim interpretation is wrong as a matter of law. *See* Sloan Br. at 8-9 (citing cases).

Zurn's non-infringement argument is also wrong as a matter of law because, even Zurn's technical expert agrees, none of the embodiments disclosed in the *Wilson* patent would be covered by the claims as interpreted by Zurn.

³ Zurn was required to disclose its non-infringement and invalidity theories in its final contentions early on in this case, and now it is far too late for it to rely on previously undisclosed theories. L.P.R. 2.3, 3.2, 3.4; *see also* *O2 Micro Int'l Ltd. v. Monolithic Power Sys., Inc.*, 467 F.3d 1355, 1366 (Fed. Cir. 2006) (a party must show diligence); *Thermapure, Inc. v. Giertsen Co. of Ill.*, 10 C 4724, U.S. Dist. LEXIS 175612, at *13-15 (N.D. Ill. Dec. 11, 2012); *Fujitsu Ltd. v. Tellabs Ops., Inc.*, Nos. 08 C 3379, 09 C 4530, U.S. Dist. LEXIS 38740, at *25, *41-43 (N.D. Ill. Mar. 21, 2012); *Trading Techs. Int'l, Inc. v. BCG Partners, Inc.*, 10 C 715, U.S. Dist. LEXIS 99415, *19-21 (N.D. Ill. Sept. 2, 2011).

⁴ Note to the Court: Zurn mis-numbered its Responsive Statement of Undisputed Material Facts so that the numbered paragraphs therein do not fully correspond with the numbered paragraphs in Sloan's Statement of Undisputed Material Facts, as required by Local Rule 56.1(b)(3)(B). It appears that Zurn's paragraphs 1-51 properly correspond to Sloan's paragraphs 1-51, but that Zurn's paragraphs 52-53 actually correspond to Sloan's paragraph 52, and Zurn's paragraphs 54-66 actually correspond with Sloan's paragraphs 53-65.

Zurn then advances as whole new claim construction and non-infringement argument: that to be an “axis of plunger travel” the straight line must “by itself, effectuate a full or reduced flush volume” Zurn Br. at 9. This argument appeared nowhere in Zurn’s proposed construction of “axis of plunger travel” during the *Markman* briefing phase (*see* Dkt. 316 at 9-11; Dkt. 338 at 7-8), nor in its non-infringement contentions. More importantly, it lacks any substantive merit.

Finally, Zurn raises a new argument regarding “flexible bushings” that appears nowhere in its non-infringement contentions and which also fails to raise a material issue of fact.

Sloan’s summary judgment papers show that the accused devices *do* have a plunger that is capable of both sliding along a horizontal axis of plunger travel *and* capable of tilting and sliding along an angled axis of plunger travel. These claim limitations are met because, as Zurn conceded at the *Markman* hearing and as compelled by the controlling case law, an “axis of plunger travel” does not require that the plunger travel in a straight line for the *entirety* of its travel, but rather requires only that a *portion* of the plunger travel paths in each of the “horizontal” and “angled” directions be along a straight line. Because both parties’ experts’ agree—and both experts’ test results show—that the plunger in Zurn’s accused device travels in a straight horizontal direction for at least a portion of the entire length of plunger travel in the “full flush” mode, and travels in a straight line at an angle to the horizontal for at least a portion of the entire length of plunger travel in the “reduced flush” mode, no genuine issue of material fact remains as to infringement of claims 1, 4-6, 10-11, 19, and 29-31 of the *Wilson* patent.

A. Sloan Has Consistently Argued That An “Axis of Plunger Travel” Does Not Require Travel Along a Straight Line For The Entire Plunger Travel Path.

Zurn feigns surprise because—according to Zurn—Sloan did not “unveil” its infringement theory until April 5, 2013. Zurn Resp. at 4, 8. Zurn ignores the clear record of this case. Sloan has made it abundantly clear for well over a year that it contends the “axes of

plunger travel” claimed in the *Wilson* patent do not require the entirety of the plunger travel paths to be straight lines because the plunger of the embodiment described in the *Wilson* patent travels along a straight line for only a portion of the plunger travel path.

In its claim construction brief filed on June 1, 2012, Sloan opposed a position advocated by Zurn on this very basis, citing the very same case (*Vitronics*) on which Sloan relies on today:

Moreover, Zurn’s construction, which calls for the plunger to travel on “a straight line,” would not cover the preferred embodiment disclosed in the *Wilson* patent. The embodiment described by Figures 5 and 6 show that the plunger travels along horizontal plunger travel axis A when the handle is pushed down, whereas the plunger tilts and travels along angled plunger travel axis B when the handle is pulled up. JA 0006, 0009 (col. 5 ll. 9-33). ***When the handle is pulled up, there is some accompanying lateral movement of the plunger as it tilts from axis “A” toward axis “B,” such that the path of the tip of the plunger will not be an entirely straight line.*** Ex. A, Ballanco Decl. ¶ 10. If Zurn’s construction were applied, the preferred embodiment in the *Wilson* patent specification would not fall within the scope of the claims. Such an interpretation is rarely, if ever, correct. *Vitronics Corp. v. Conceptronic*, 90 F.3d 1576, 1583 (Fed. Cir. 1996).

Dkt. 326 at 21 (emphasis added).

Mr. Ballanco’s declaration, also submitted in June 2012, provided further support for Sloan’s position that a construction that required a straight line of plunger travel for the entirety of the plunger travel path would not even cover the invention described in the *Wilson* patent:

10. I have studied the embodiment described by Figures 5 and 6 of the *Wilson* patent that show that the plunger travels along horizontal plunger travel axis A when the handle is pushed down, whereas the plunger tilts and travels along angled plunger travel axis B when the handle is pulled up. JA 0006, 0009 (col. 5 ll. 9-33). Based on my personal experience and my review of dual mode flush valve handles, in the embodiment described by Figures 5 and 6 of the *Wilson* patent, ***when the handle is pulled up, there is going to be some accompanying lateral movement of the plunger as its tilts from axis “A” toward axis “B,” such that the path of the tip of the plunger will not be an entirely straight line.***

Ex. 15 ¶ 10 (Dkt. 326-1) (emphasis added).

Mr. Ballanco reiterated that point at the August 28, 2012 *Markman* hearing: Ex. 96, *Markman* Tr. 19:18-22, Aug. 28, 2012.

Counsel for Sloan reiterated Sloan's explanation that the claims cannot, as a matter of law, require that the plunger move in a straight line during the entirety of its travel path:

Mr. Florsheim: Then there's one last question I have, which isn't really answered in Zurn's papers, about what Zurn means by its proposed construction. Its construction requires a straight line of travel. And the question is, does it require that the entire lateral movement of the plunger be in a straight line or is it sufficient that part of the lateral movement be in a straight line?

If their construction requires the entire lateral movement to be in a straight line, this claim would not even cover the preferred embodiment, which, as the Court knows, is not a proper construction.

So, the Court may recall Mr. Ballanco going through the animation and *initially when you get the handle impacting the plunger, you get that sort of arcing movement where the plunger is moving laterally and pivoting upward at the same time*. And the reason for that—I'm going to try this John Madden thing; not bad—the reason for that is the handle—the flat part of the handle—cannot go any further to the left than the housing. Right? So, *it has to force the thing forward and up at the same time*.

And, more importantly, there's a declaration in the record—the only actual evidence in the record on this—is there has to be some accompanying lateral movement. So, if you were going to construe this as requiring that the entire path be straight, you'd have a construction that wouldn't even cover the only disclosed embodiment. I don't know if Mr. McIlvaine, or whoever is speaking for the other side, is going to address their animation, but I'll make some points about that on rebuttal if they do.

The Court: Okay.

Mr. Florsheim: Okay. So, this is back to the point about - - from Adams Respiratory that *a construction that doesn't cover the preferred embodiment is rarely, if ever, a correct one*. It would require highly persuasive evidentiary support.

Id. 106:21-108:5 (emphasis added). Thus, even though Sloan took the position during claim construction that the “axis of plunger travel” was defined by the shape of the bushing passage—

an interpretation that the Court ultimately did not adopt—Sloan has consistently argued for over a year that the claims cannot require that the plunger travel in a straight line for the entirety of its plunger travel path.

B. Zurn’s “Flexible” Bushing Argument Fails Both on its Merits and Because It Was Not Disclosed By Zurn Until Summary Judgment.

In its response brief, Zurn repeats many of the same non-infringement arguments that Zurn raised in its opening brief. For example, Zurn restates its non-infringement theory that the Zurn bushing is sufficiently “flexible” to avoid infringement. As fully explained in Sloan’s response brief, Zurn’s “flexible bushing” theory: (a) fails as a matter of procedure because it was never raised by Zurn in its non-infringement contentions nor was it addressed in any of Zurn’s expert reports (Sloan Resp. at 8-9); (b) fails on the merits because a fair reading of what Sloan said in the *Wilson* patent reexamination is entirely consistent with Sloan’s position in this litigation (*Id.* at 9-12); and (c) is not relevant to the issue of whether the *Zurn valve* infringes the *Wilson* patent because those statements related to the *Billeter* bushing (*id.* at 13).

C. The Intrinsic Record Does Not Support Zurn’s Construction That the “Axis of Plunger Travel” Must “By Itself, Effectuate a Full or Reduced Flush Volume.”

Zurn advances a new claim construction (and non-infringement) argument that, in addition to the requirements for “axis of plunger travel” set forth in the court’s claim construction, “any portion [of the plunger travel path] that does not, by itself, effectuate a full or reduced flush volume cannot constitute an axis of plunger travel.” Zurn Resp. at 9. The Court will look in vain for any such actual or proposed construction of “axis of plunger travel” in its *Markman* ruling, in Zurn’s prior claim construction papers, or in Zurn’s non-infringement contentions. This new claim construction and non-infringement argument should be rejected for this reason alone.

Indeed, in its non-infringement contentions, Zurn said the following regarding the very language of claim 1 it now contends means that the axis of plunger travel must ‘by itself, effectuate a full or reduced flush”:

Tilting the handle of the accused device in a first direction does not move the plunger along a first axis of plunger travel.
Notwithstanding this, tilting the handle of the accused device in a first direction provides a first flush volume of water adequate to evacuate solid waste.

Ex. 93 at 9. Thus, in its non-infringement contentions, Zurn gave this claim limitation its common sense meaning—that it is the user’s action in “tilting the handle” in a first direction or a second direction that “provides a first flush volume or a second flush volume.” Now, though, Zurn points to the very same language of claim 1 of the *Wilson* patent as requiring that “the axis” of plunger travel “itself” must “provide” the first and second flush volumes. But as Zurn recognized in its infringement contentions, it is the action of the user in tilting the handle up or down, transferred through a mechanical linkage, that actually “provides” the full and reduced flush volumes. The “axis of plunger travel” is merely a straight line in space—it cannot and does not “itself” “provide” anything.

In any event, Zurn is reading far too much into the word “provides” in claim 1. Zurn implicitly equates “provides” with “is the sole determining factor.” It is not the curviness or straightness of the path that the plunger travels immediately before it hits the relief valve that determines the flush volume; rather it is the point where the plunger tip actually strikes the relief valve that determines how much water is released. Ex. 97, *Wilson* Dep. 18:1-17, 90:10-19, 94:15-95:5, Oct. 14, 2010. Nothing in claim 1 requires that the plunger must be traveling in a straight line at the time its tip strikes the relief valve. As illustrated in the example below, the plunger can “provide” a reduced flush volume even if the straight portion of its travel path stops well before the point when the plunger tip hits the relief valve stem:

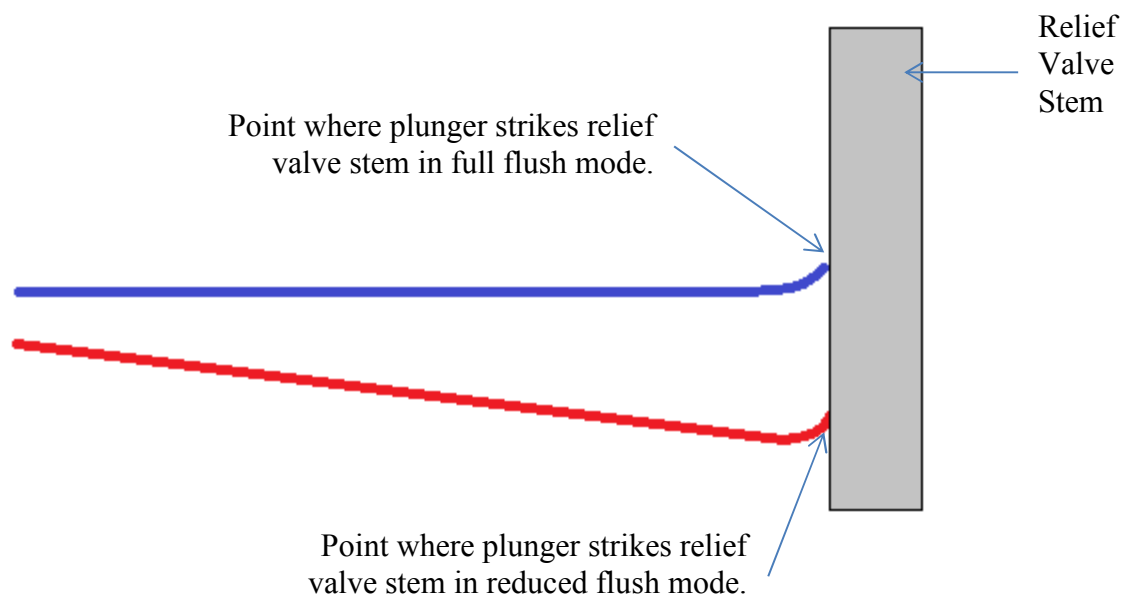


Figure 1

Even if the Court were to construe claim 1's phrase "tilting the handle in a first (second) direction moves the plunger along the first (second) axis of plunger travel providing a first (second) volume of water" to require that the plunger still be moving in a straight line at the time it strikes the relief valve stem, there is no such requirement in any of claims 10, 11, 19, 29, 30 or 31, each of which are also the subject of Sloan's motion for summary judgment.

Claims 10 and 11 have no explicit reference to "axes of plunger travel," and the only limitation of claims 10 and 11 that refers to "plunger mounted for sliding and tilting" depends from claim 9. Claim 9 simply requires that the device comprise "a plunger mounted for sliding and tilting in said non-symmetrical bushing passage and having an outer end in engagement with the handle" Ex. 6, col. 7, ll. 52-54. The only limitation of claim 19 that refers to "axes of plunger travel" merely requires "a first plunger travel axis is disposed substantially horizontally in the bushing passage and a second plunger travel axis is disposed within the bushing passage at an angle to the first plunger travel axis." *Id.* col. 8, ll. 55-59. None of claims 29, 30 or 31 contain the language that Zurn relies on in claim 1, either. Claim 29 (and claim 30, by

dependence) merely says that each different volume of water is “associated with” one of the different first axis and second axis of travel of the plunger. *Id.* col. 10, ll. 9-11. Claim 31 merely requires that the plunger “travel longitudinally through the passage along a first axis striking the relief valve stem at a first location” and “travel along an angled axis of travel striking the relief valve stem at a second location.” *Id.* col. 10, ll. 38-43. None of these claims require that the “axis of plunger travel” “provide” anything, much less require that plunger be traveling in a straight line at the instant it strikes the relief valve. Thus, the language of claim 1 that Zurn contends links the “axis of plunger travel” to “providing” the first and second flush volumes of water is completely absent from claims 10, 11, 19, 29, 30 and 31 and provides no basis for a non-infringement defense as to any of those claims.

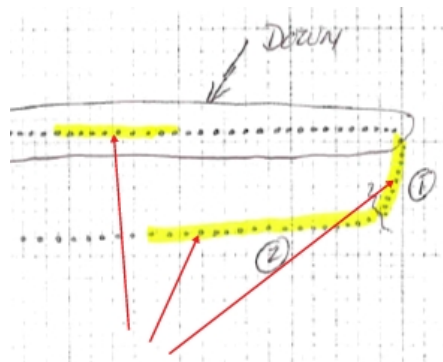
D. Zurn’s Indefiniteness Argument Fails Because Sloan is Not Asking the Court to Give No Meaning to the Term “Axis of Plunger Travel.”

Zurn also argues that Sloan’s claim construction—i.e., that the entire plunger travel path does not have to be straight, only a portion of it has to be—renders the *Wilson* patent claims “indefinite.” Zurn Resp. at 8. Zurn relies on *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945 (Fed. Cir. 2006). *Bicon*, however, is readily distinguishable from this case. There, the patentee argued that a particular claim term should not limit that claim. *Id.* at 949-50. The Court rejected the patentee’s argument because it would have required “the public to look past the plain language of the claims and guess whether a detailed description of a structural feature in a claim is superfluous to the scope of the claimed invention and unnecessary to establish infringement.” *Id.* at 951. *Bicon* merely states that claims are interpreted to give meaning to all terms in the claim—that is, that claims should not be construed in a manner that renders some of the claim language superfluous.

Here, Sloan is not asking the Court to give no meaning to the term “axis of plunger travel” or the phrase “providing a first (second) flush volume of water.” The Court has held that “axis of plunger travel” refers to the path the plunger travels. Dkt. 391 at 40. both parties understand that the Court’s construction requires that a portion of that travel path be straight. Those are substantive meanings that the Court has already given to the term “axis of plunger travel.” The Court’s construction does not render the term “axis of plunger travel” meaningless.

As to the phrase “providing a first (second) flush volume of water,” as noted above both Zurn and Sloan initially contended that this means just what it says—that the action of the user in “tilting the handle in a first (or second) direction” results in “providing a first (or second) flush volume of water.” The fact that Zurn has now reversed field and is now advocating a different construction does not mean that Sloan’s construction renders this claim language “meaningless.”

Contrary to what Zurn says, Sloan is also not contending that an “axis of plunger travel” should be defined as “best-fit line” or “non-linear path of travel” or an arbitrary line drawn between “any two points within the plunger path.” Zurn Resp. at 8. As Sloan understands the Court’s claim construction, a portion of the actual path that the plunger follows has to be a straight line. Both experts agree that that is true as to the Zurn device. Mr. Magee pointed to several “straight” segments in the plunger travel path at his deposition, which he highlighted in the figure below (indicated by red arrows):



Ex. 9, Magee Dep. Ex. 607 (red arrows added); *see also* Ex. 7, Magee Dep. 102:3-22; 103:3-7; Sloan Br. at 16-18. Mr. Ballanco identified several segments that were traveling along a horizontal travel path in his reply expert report dated April 5, 2013. *See* Ex. 18 at 16, 18-19. Thus, both parties' expert's evidence shows that the plunger of Zurn's accused product would meet the "axis of plunger travel" claim limitations when construed as requiring a portion of the actual plunger travel paths to be straight.⁵

E. Zurn's Claim Construction Would Exclude The Preferred Embodiment Disclosed in the *Wilson* Patent.

As Sloan pointed out during the claim construction proceedings, *see excerpts supra* at 5-6, and further explained in Sloan's opening summary judgment brief, there is a consistent line of Federal Circuit authority holding that "it is axiomatic that a claim construction that excludes a preferred embodiment . . . 'is rarely, if ever correct and would require highly persuasive evidentiary support.'" Sloan Br. at 8-9. Here, *both parties' experts agree* that if Zurn's currently-asserted claim construction position were adopted, none of the embodiments disclosed in the *Wilson* patent would be covered by the claims of the *Wilson* patent, which would contradict this black letter law. *See* Ex. 8, Magee Dep. 113:8-114:2, 114:20-115:13.

Zurn responds to this with two arguments. First, Zurn argues that its claim construction, if adopted, would not exclude embodiments covered by *unasserted* claims of the *Wilson* patent (e.g., claims 23-27), and that therefore—according to Zurn—the black letter law cited by Sloan is "misplaced." Zurn Resp. at 9-10. Zurn's argument (which does not rely on any case law) is an implicit admission that Zurn's construction—if adopted—*would* exclude embodiments of the

⁵ Zurn makes a similar argument that Sloan's interpretation would "improperly delete" the "axis of plunger travel" claim terms from the claims "because one could take any plunger travel path, including those from prior art or the accused device, and find this in the device." Zurn Resp. at 6. Zurn's argument makes little sense, especially because Zurn does not explain how a term becomes "deleted" from a claim simply because that feature is found in the prior art. Prior art flush valves also have bushings and plungers and pressure chambers, but that does not make those claim terms "deleted" from the claims.

Wilson invention that are covered by the *asserted* claims—yet it still wants the Court to adopt a construction that would lead to such legally improper result. .

Second, Zurn argues that Sloan failed to identify the “preferred embodiment” that would allegedly not be covered by Zurn’s claim construction. This is a red herring. **Both** parties’ experts agree that the construction relied upon by Zurn’s expert Mr. Magee, if adopted, would result in the *Wilson* patent claims not covering the embodiment disclosed in the *Wilson* patent specification. The specification describes *in detail* only one embodiment of the *Wilson* invention.⁶ That preferred embodiment is shown in Figures 5 and 6 and explicitly discussed in the “Detailed Description of the Invention” section of the specification, which also acknowledges discussion of a single embodiment. Ex. 6, col. 6, ll. 36-38 (“While the preferred form of the invention has been shown and described herein, it should be realized that there may be many modifications, substitutions and alterations thereto.”). The discussion of that embodiment specifically identifies the “horizontal plunger travel axis A” and “angled plunger travel axis B” that are shown in Figures 5 and 6. For Zurn to now pretend that it does not understand the embodiment described in the *Wilson* patent—and to take the position that that “preferred” embodiment of the *Wilson* patent somehow does not require horizontal and angled axes of plunger travel—contradicts the testimony of Zurn’s own technical expert, who repeatedly made reference to Figures 5 and 6 at his deposition when explaining why the invention disclosed in those figures of the *Wilson* patent would not, in his opinion, be covered by the claims of the *Wilson* patent. See Ex. 8, Magee Dep. 112:4-114:2).⁷

⁶ Alternative embodiments are described briefly in the specification. Ex. 6, col. 5, ll. 48-67.

⁷ On a somewhat related issue, Zurn’s argument that the Sloan Uppercut® is not an embodiment that is covered by the asserted claims of the *Wilson* patent is undermined by Zurn’s best mode argument in which Zurn assumes that the Sloan Uppercut® is the *preferred* embodiment of the *Wilson* patent.

Zurn’s attempt to distinguish *Anchor Wall* is unavailing. In *Anchor Wall*, the Federal Circuit held that it was error to construe a claim to exclude a preferred embodiment disclosed in the specification and depicted in one of the figures of the patent. *Anchor Wall Sys. v. Rockwood Retaining Walls*, 340 F.3d 1298, 1308-09 (Fed. Cir. 2003). Zurn then states: “Here, Zurn’s construction does not exclude Figures 5 and 6.” Zurn Resp. at 11. But Zurn’s technical expert explicitly referred to Figures 5 and 6 of the *Wilson* patent when he concluded that the claims of the *Wilson* patent would *not* cover the embodiment disclosed in those patent drawings. Ex. 8, Magee Dep. 112:4-114:2.

Zurn’s reliance on *Chef America, Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371 (Fed. Cir. 2004) is also misguided. There, the claims required “heating the . . . dough to a temperature in range of about 400 F to 850 F.” *Id.* at 1373. The patentee sought a construction in which the temperature range referred to that of the oven, not the dough itself, on the grounds that if applied to the dough, the process would result in a burnt crisp. *Id.* at 1373-74. But the court noted that the words were “susceptible to only one reasonable construction” and concluded the language unambiguously required heating the dough, not the oven. *Id.* at 1374. Numerous courts have noted that *Chef America* is limited to exactly such situations—where the words in the claim have no other possible, reasonable construction. *See, e.g., Ecolab, Inc. v. FMC Corp.*, 569 F.3d 1335, 1345 (Fed. Cir. 2009); *Adams Respiratory Therapeutics, Inc. v. Perrigo Co.*, 616 F.3d 1283, 1290-91 (Fed. Cir. 2010). This Court distinguished *Chef America* in *Viskase Cos. v. World Pac Int’l AG*, 714 F. Supp. 2d 878 (N.D. Ill. 2010). There, the claims required an “impermeable” food casing. *Id.* at 880. The plaintiff, relying on *Chef America*, sought an absolute construction of the term to mean “not permeable” even though no food casing in the world is 100% impermeable. *Id.* at 882. This Court did not find *Chef America* dispositive. In rejecting the plaintiff’s argument, Judge Bucklo stated the importance of reading claim terms in the context of

the patent. *Id.* (“The point is that the manner in which ‘impermeable’ and related words are used throughout the patent reveal that the patentee defined those words by reference to the quality of preventing losses in weight, taste and flavor.”).⁸

Here, as noted above (*see discussion supra* at 7-12) the claim language is susceptible to a reasonable construction—indeed, the construction that Zurn adopted both at the *Markman* hearing and in its infringement contentions and only abandoned for purposes of its summary judgment motion—which will, as in *Adams Respiratory Therapeutics, supra*, result in a construction that covers the preferred embodiments disclosed in the *Wilson* patent. Given the availability of that alternate, eminently reasonable construction, *Chef America* does not compel this Court to adopt Zurn’s new construction, which would lead to the result that the claims would not even cover what Mr. Wilson invented.

F. Zurn Should Not Be Allowed to Renege on the Position it Took in Open Court on This Very Issue.

Zurn cites *Moose Lodge No. 107 v. Irvis*, 407 U.S. 163, 170 (1972) for the proposition that “[s]pontaneous answers given during the course of questioning during oral proceedings such as a Claim Construction hearing are to be afforded little weight.” Zurn Resp. at 13. Zurn misrepresents *Moose Lodge*. Nowhere in *Moose Lodge* does the Court say that “little weight” should be given to answers given during oral proceedings. That case involved an appellee’s discrimination claim against a club for refused service solely because of his race. *Id.* at 164. When the Court held that appellee lacked standing to challenge the constitutionality of club policies relating to membership (because appellee was a *guest* of a member), the club argued that the appellee waived its chance to challenge the constitutionality of club services offered to *guests*

⁸ Moreover, *Chef America* was decided prior to the Federal Circuit’s *Phillips* decision that clarified claim construction analysis, thus casting doubt on its weight given that the *Chef America* court construed the claims using the outdated “ordinary meaning of the terms” approach. 358 F.3d at 1373.

of members because the appellee stated at oral argument that relief limited to guests would not have fully redressed the discriminatory harm. *Id.* at 168-69. The Court held that because the statement was ambiguous—equally capable of two different meanings—it would not ascribe the broader meaning to those statements:

We are loath to attach conclusive weight to the relatively spontaneous responses of counsel to equally spontaneous questioning from the Court during oral argument. However, upon examination of this answer it reflects substantially the same position as appellee took in his brief here. While it is possible to infer from these statements that appellee is simply not interested in obtaining any relief as to guest practices of Moose Lodge if he should prevail on the merits, it is equally possible to read them as being tactical arguments designed to avoid having to settle for half a loaf when he might obtain the whole loaf.

Id. at 170. The substance and context of Zurn’s statements made at the *Markman* hearing are quite different. First, there was nothing ambiguous about Zurn’s statement made at the *Markman* hearing: “[T]he entire travel path does not have to be straight. A portion of it has to include an axis.” Ex. 96, *Markman* Tr. 113:19-21. Second, Zurn cannot call its statements “spontaneous” where they involved a claim construction issue that was fully briefed and explicitly addressed by both parties and the Court at the *Markman* hearing. Sloan’s counsel raised the issue in its brief (Dkt. 326 at 21) and at the hearing (Ex. 96 at 106:21-108:5), and the Court asked a direct question to Zurn’s counsel on this very topic (*id.* 113:10-13). Zurn is attempting to renege on its answer not because it was made spontaneously, but rather because it changed its non-infringement position after the Court’s *Markman* ruling without seeking leave to do so. The local patent rules specifically preclude a party from changing course at this late stage, and Zurn’s citation to a 40-year old Supreme Court case that has nothing to do with patent law cannot justify Zurn’s “shifting sands” approach to claim construction. *Fujitsu Ltd.*, U.S. Dist. LEXIS 38740, at

*25.⁹ Zurn cites no authority for its rather bold statement that “this Court should not give any weight to any allegedly limiting statements made by Zurn’s counsel in the context of claim construction.” Zurn Resp. at 14. It appears, if it were up to Zurn, that *Markman* proceedings would be rendered meaningless.

II. SLOAN IS ENTITLED TO SUMMARY JUDGMENT ON ZURN’S BEST MODE DEFENSE.

To prevail on its best mode defense, Zurn would have to prove by clear and convincing evidence that John Wilson believed that there was a particular best mode of carrying out his claimed invention. *See Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1330 (Fed. Cir. 2002). The undisputed evidence in the record is that Mr. Wilson did not subjectively believe, at the time of filing, that there was a particular best tilt portion angle or a particular best percentage reduction in flush volume to use in practicing his invention. Zurn has failed to raise a genuine issue of material fact on any of these issues; instead it relies on speculation and inferences based on documents that were not even authored by Mr. Wilson. Further, the “30% reduction” basis for Zurn’s best mode argument was never raised in any of Zurn’s invalidity contentions, so it is far too late to raise it now. Accordingly, judgment as a matter of law should be granted in Sloan’s favor on Zurn’s best mode defense.

A. Zurn Failed to Rebut Sloan’s Argument That a Commercial Embodiment is not Presumptively the Best Mode for Carrying Out an Invention.

Zurn’s entire best mode defense is premised on the assumption that “only a single embodiment of the invention [was] contemplated by the inventor”—the Sloan Uppercut®, which is Sloan’s commercial embodiment of the *Wilson* invention, and which Zurn assumes to be the

⁹ In its response brief, Zurn appears to present yet another shift in its claim construction theory by stating that “the claims require a step function/initial displacement and an axis of travel thereafter.” Zurn Resp. at 13. Zurn previously contended that the accused products do *not* infringe because they exhibit a step function. Ex. 92 at 5.

best mode of practicing the invention. *See* Zurn Resp. at 14; *see also* Sloan Br. at 35-36. As fully explained in Sloan’s response brief, Federal Circuit authority clearly requires the best mode inquiry to be directed to what the inventor believed was the invention, not focus on the particular commercial embodiment of the invention his employer chose to sell. Sloan Br. at 40-42. Zurn failed to provide any rebuttal on this point. In fact, Zurn actually admits in its response brief that Mr. Wilson contemplated more than one embodiment of his invention. Zurn Resp. at 16 (“[T]here is no dispute that Sloan had at least four different embodiments, each with different angles.”). The case law, unchallenged by Zurn, makes clear that the fact that Sloan chose to sell a commercial product with a particular tilt angle (and flush volume reduction) does not establish that Mr. Wilson subjectively believed, at the time of filing, that those characteristics were the best mode of carrying out his invention.

Zurn cites *Chemcast Corp. v. Arco Industries Corp.*, 913 F.2d 923 (Fed. Cir. 1990), to support its argument that—according to Zurn—Mr. Wilson contemplated only a single, and therefore best, mode of his invention, the Sloan Uppercut®. However, unlike in *Chemcast*, where the court specifically found that the inventor knew of *only one* embodiment of the claimed invention, *id.* at 929, Mr. Wilson contemplated several embodiments of the *Wilson* invention, a fact which Zurn does not dispute. Zurn Stmt. ¶ 50; *see also* Ex. 32 (photographs of Mr. Wilson’s prototypes). Mr. Wilson also testified that he did not believe that any particular angle was best because “[t]here are many systems out there this can be applied to.” Ex. 13, Wilson Dep. 74:18-24. Zurn’s argument erroneously focuses on Sloan’s commercial embodiment, and Zurn has failed to address the cases cited by Sloan that make clear that the best mode inquiry is directed to what the applicant regards as the claimed invention, not the particular commercial embodiment the assignee elects to sell. *Zygo Corp. v. Wyko Corp.*, 79 F.3d 1563, 1567 (Fed. Cir. 1996); *Wahl Instruments, Inc. v. Acvious, Inc.*, 950 F.2d 1575, 1579 (Fed. Cir. 1991).

B. Zurn Failed to Present Any Evidence that Mr. Wilson Subjectively Believed There Was a Best Tilt Angle for His Invention.

Zurn's argument that Mr. Wilson, at the time of filing, believed there was a best tilt angle to practice his invention is based solely on speculation, not clear and convincing evidence. In its response brief, Zurn states:

Here, there is no dispute that Sloan had at least four different embodiments, each with different angles. ***Wilson had to have preferred at least one of these embodiments***, and the evidence suggests that it was the one-degree embodiment.

Zurn Resp. at 16 (emphasis added). Zurn cites to no evidence that indicates that Mr. Wilson subjectively believed there was a best tilt angle, and Zurn has failed to rebut—or even acknowledge—Mr. Wilson's deposition testimony which conclusively shows that he did not subjectively believe there was a certain angle that was superior to all other angles:

Q: What's the angle that you finally settled on?

A: Actually, I didn't settle on an angle.

Ex. 13, Wilson Dep. 69:22-24.

Q: Why didn't you put the amount of tilt in the patent?

A: There are many systems out there this can be applied to.

Q: So it will be a different tilt angle for a different system?

A: Yes.

Id. 74:18-24; *see also* Sloan Br. at 34-35.

The lack of Mr. Wilson's subjective belief at the time of filing that there was a best tilt angle is fatal to Zurn's best mode case. *Dana Corp. v. IPC Ltd. Partnership*, 860 F.2d 415 (Fed. Cir. 1988) and *Nobelpharma Ab v. Implant Innovations*, 141 F.3d 1059 (Fed. Cir. 1998), are distinguishable for this reason. In those cases there was "uncontroverted and corroborating evidence" that the inventor subjectively possessed a best mode of carrying out the invention at

the time of filing. *Dana Corp.*, 860 F.2d at 419. In *Dana Corp.*, the inventor’s own report stated that only certain fluoride-treated seals performed the claimed invention adequately. *Id.* at 419-20. In *Nobelpharma*, a co-inventor testified that he was aware of a variety of undisclosed parameters and details that were critical to the production of a functional product under the patent, and that skilled artisans would have to be “lucky” to figure that out. *Nobelpharma*, 141 F.3d at 1065. That kind of evidence is simply not present in the record in this case.

Here, the only evidence of the state of mind of John Wilson at the time of filing was that he did *not* believe there to be a best tilt angle. Zurn cites *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524 (Fed. Cir. 1987), to support its argument, but the key factual finding in that case was that the undisclosed “six stage braze cycle employed by [the patentee], and developed by it, ***is necessary to the enjoyment of the invention*** taught by the patents in suit by a person skilled in the art of laser construction” *Id.* at 1537. Similarly, Zurn cites to *Great Northern Corp. v. Henry Molded Products*, 94 F.3d 1569 (Fed. Cir. 1996), but that case also found that the claimed invention ***could not be produced without*** using diamond indentations, a production step not disclosed in the patent. *Id.* at 1572. Therefore, in each case, that process had to be the best mode because there was no other possible mode. Here, unlike in *Spectra-Physics* and *Great Northern*, the specific tilt angle employed in Sloan’s Uppercut® is ***not necessary*** to practice the *Wilson* invention. Indeed, Zurn’s infringing dual mode flush valve handle employs a *different* tilt angle than the tilt angle present in Sloan’s Uppercut®. Sloan Stmt. ¶ 55; Zurn Resp. Stmt. ¶ 56.

C. Zurn’s Invalidity Contentions Never Mentioned its New 30% Reduction in Flush Volume Basis for its Best Mode Defense.

Zurn also argues that the *Wilson* patent fails to disclose a 30% reduction in flush volume was the preferred reduction in flush volume. This argument fails for three reasons. The first is that Zurn failed to even raise this as a grounds for invalidating the *Wilson* patent in its invalidity

contentions; it is far too late to raise this argument at this stage. Zurn's invalidity and unenforceability contentions as to best mode identified only four things Zurn contended were not disclosed by Sloan: "(a) the optimum angle or range of angles between the claimed first and second axis of plunger travel (b) the optimum degree of tilt in the bushing passage; (c) the nature and design of the bowls with which the claimed flush valves should be used; and (d) that the claimed flush valve should be roughed-in at an elevation (i.e. three feet) from the facility floor." Ex. 95 ¶ 17 (Dkt. 447); Ex. 94 ¶ 23. The local patent rules require a party to provide all of its grounds of invalidity in its invalidity contentions, and Zurn's failure to raise this argument there constitutes waiver of this argument. *See supra*, note 3.

D. Zurn Has Not Proven With Clear and Convincing Evidence That Mr. Wilson Subjectively Believed a 30% Reduction in Flush Volume Was the Best Way of Practicing His Claimed Invention.

Zurn has deposed Mr. Wilson three times in this litigation. At none of the three depositions did Zurn ever ask Mr. Wilson whether he subjectively believed, at the time of filing, that a 30% reduction in flush volume was the best percentage reduction in flush volume to use in practicing his invention. Affidavit of John Wilson ¶ 5 ("Wilson Aff.," filed contemporaneously herewith). Instead, Zurn again *assumes* that it is the best percentage simply because Sloan's commercial embodiment practices a 30% reduction in flush volume, which is consistent with industry standards for 1.6 gallon per flush ("gpf") systems.

Had Zurn inquired into this issue with Mr. Wilson, it would have discovered that Mr. Wilson did *not* subjectively believe there was a particular best percentage reduction in flush volume for practicing his invention. *Id.* ¶ 6. Rather, Mr. Wilson's invention can be applied to many systems, and the best percent reduction in flush volume for one system will be different for different systems. *Id.* ¶ 7. The best reduced flush volume, and consequently the best percentage

reduction in flush volume, is dependent on the type of flush valve system—including the type of toilet bowl—that will be used. *Id.*

Sloan's Uppercut® flush valve system is typically used with a low-consumption flush valve system, which is designed to flush 1.6 gallons per flush (gpf) in the full flush mode. Wilson Aff. ¶ 8. These 1.6 gpf flush valve systems are used with toilet bowls that can be satisfactorily cleared of liquid waste (including toilet paper debris) with a flush of approximately 1.1 gallons. *Id.* A reduced flush volume of 1.1 gpf on a 1.6 gpf system represents approximately a 30% reduction in flush volume for the reduced flush mode. *Id.*

But John Wilson's invention is not limited to the Sloan Uppercut®, and when applied to other systems a 30% reduction in flush volume is not appropriate. *Id.* For example, Mr. Wilson's invention can be, and has been, applied to 3.5 gpf systems, which are designed to flush 3.5 gpf in the full flush mode. *Id.* ¶ 9. The 3.5 gpf flush valve systems are used with toilet bowls that require a flush of approximately 3.0 gallons to be satisfactorily cleared of liquid waste (including toilet paper debris). *Id.* Anything less than 3.0 gallons of water flushed in a 3.5 gpf flush valve system will not clear the bowl completely of liquid waste. *Id.* A reduced flush volume of 3.0 gpf on a 3.5 gpf system represents only about a 15% reduction in flush volume. *Id.*

The *Wilson* invention can also be applied to, and has been tested with, 1.28 gpf high-efficiency toilet (HET) systems, which are designed to flush 1.28 gpf in the full flush mode. Wilson Aff. ¶ 10. The 1.28 gpf HET flush valve systems are used with toilet bowls that require a flush of approximately 1.05 gallons to satisfactorily clear liquid waste (including toilet paper debris). *Id.* Anything less than 1.05 gallons of water flushed in a 1.28 gpf HET flush valve system will not clear the bowl completely of liquid waste. *Id.* A reduced flush volume of 1.05 gpf on a 1.28 gpf system represents only about an 18% reduction in flush volume. *Id.*; *see also id.* ¶ 11.

Zurn cannot rely on speculation to prove whether Mr. Wilson's subjectively believed there was, at the time of filing, a best percentage reduction in flush volume. Had Zurn asked Mr. Wilson about this issue during his depositions, Zurn would have discovered what the only evidence in the record shows: that he did not subjectively believe there was a best percentage reduction, but rather that it depended on the system to which his invention was applied.

E. One of Ordinary Skill in the Art Would Have Known It Was Desirable to Target a 30% Reduction in Flush Volume for a 1.6 GPF Water Closet to Comply With the Industry Standard.

Here, even one were to ignore Mr. Wilson's belief that this invention was applicable to several different systems requiring different percentage reductions in flush volume, one of ordinary skill in the art would have known to target a 30% reduced flush volume if he or she desired to comply with the existing industry standard for 1.6 gpf water closets. *See* Sloan Br. at 42-43 (citing Sloan Stmt. ¶58; Ex. 8, Magee Dep. 76:10-77:6). There is also no clear and convincing evidence that Mr. Wilson intentionally concealed that information, since Zurn's only offering is an email suggestion by a Sloan employee to refrain from selling Uppercut® replacement kits, which is not evidence of concealment of the 30% reduction in flush volume. Sloan Resp. Stmt. ¶64. The 30% reduction for 1.6 gpf systems was clearly known to the public because of the published standard, and was also disclosed to the public in Sloan's marketing materials. *See* Exs. 63, 64.

In *High Concrete Structures, Inc. v. New Enterprise Stone & Lime Co.*, 377 F.3d 1379 (Fed. Cir. 2004), cited by Zurn (Zurn Resp. at 21), the Federal Circuit *reversed* the district court's summary judgment ruling that the patent violated the best mode requirement. The patent claimed a method and apparatus for tilting heavy truck cargo, but did not disclose that the tilting was preferably done through use of a crane. *Id.* at 1382. The court stated that "the best mode requirement is not violated by unintentional omission of information that would be readily

known to persons in the field of the invention.” *Id.* at 1383. Because those skilled in the art would have known that crane use was an option, and because there was no evidence of intent to deliberately conceal that information, there was no best mode violation. *Id.* at 1383-84.

III. SLOAN IS ENTITLED TO SUMMARY JUDGMENT ON ZURN’S ENABLEMENT DEFENSE.

Judgment as a matter of law on the issue of enablement should be granted in favor of Sloan because Zurn has failed to submit sufficient evidence from which a jury could reasonably conclude that one skilled in the art could not have followed John Wilson’s specification to practice the claimed invention.

A. Zurn’s Argument That the Wilson Patent is Non-Enabling Goes Only to the Sloan Uppercut®.

Zurn argues that one of the “dispositive” factors on the issue of undue experimentation is “Wilson’s extensive trial and error in developing the Uppercut®.” Zurn Resp. at 26. Zurn, however, does not dispute the point raised by Sloan that the *Wilson* patent claims are not limited to the specific Sloan Uppercut® embodiment. *See* Sloan Br. at 44-46. Thus, rather than addressing whether, at the time of filing, one skilled in the art could practice the *claimed invention*, Zurn’s argument only goes to whether one skilled in the art could practice the *commercial embodiment* without undue experimentation.¹⁰ The limited evidence that Zurn cites in support of its argument—even if undisputed—cannot possibly lead a jury to reasonably conclude that one skilled in the art could not have followed John Wilson’s specification to practice the *claimed invention*.

¹⁰ Zurn utterly failed to address Sloan’s arguments that Mr. Magee’s “undue experimentation” testimony is unsupported and conclusory, so for purposes of this motion Mr. Magee’s testimony should be deemed unsupported and conclusory and should carry little probative weight, if any. Sloan Br. at 47-49; *see also Cephalon, Inc. v. Watson Pharms.*, 707 F.3d 1330, 1338 (Fed. Cir. 2013).

B. Zurn Failed to Allege in Its Final Contentions the Failure to Teach “Axes of Plunger Travel” as a Basis for its Enablement Defense.

Zurn also argues that the *Wilson* patent claims cover an invention that Sloan could not make because—according to Zurn—the Sloan Uppercut® does not exhibit a horizontal axis of plunger travel or an angled axis of plunger travel.¹¹ This argument—which is premised on Zurn’s erroneous claim construction—was not disclosed in Zurn’s final invalidity and unenforceability contentions (Ex. 95), therefore Zurn should be precluded from raising it at this late stage in the proceedings.¹² *See supra*, note 3. Even if this argument had been asserted in Zurn’s final invalidity and unenforceability contentions—which it was not—Zurn cannot survive summary judgment without setting forth specific evidence that does more than simply raise some doubt regarding enablement. *Johns Hopkins Univ. v. Cellpro, Inc.*, 152 F.3d 1342, 1359 (Fed. Cir. 1998). Zurn has not done that.

Ormco Corp. v. Align Tech., Inc., 498 F.3d 1307 (Fed. Cir. 2007), does not support Zurn’s argument because that case involved a situation where an inventor provided direct testimony that he had never attempted to create a computerized system that was fully automated, which was required by the claims. *Id.* at 1318. Zurn has not, and cannot, refer to any analogous testimony from the inventor in this case. Sloan has always maintained that the Sloan Uppercut® is a commercial embodiment of Wilson’s claimed invention. Ex. 97, Wilson Dep. 54:15-55:4.

¹¹ Sloan notes that this argument directly contradicts Zurn’s first argument. How can Zurn argue, on the one hand, that the *Wilson* patent is non-enabling because it took “extensive trial and error” for Mr. Wilson to develop the Uppercut®, and at the same time argue that the Uppercut® embodiment is not covered by the *Wilson* patent claims?

¹² Zurn faults Sloan for failing to discuss in Sloan’s brief “Zurn’s actual enablement contentions—that one of skill cannot make and use a flush valve with a horizontal and an angled axis of plunger travel by following the teachings of the ’635 Patent.” Zurn Resp. at 23. However, that contention does not exist in Zurn’s final invalidity and unenforceability contentions. Not surprisingly, Zurn in its brief also fails to “discuss” this purported contention, and fails to provide a citation to such a contention.

IV. SLOAN IS ENTITLED TO SUMMARY JUDGMENT ON ZURN'S WRITTEN DESCRIPTION DEFENSE.

Once again, Zurn responds to an issue that is ready for judgment as a matter of law by raising a defense that Zurn failed to disclose in its final invalidity and unenforceability contentions. Zurn argues that the *Wilson* patent specification allegedly does not provide an adequate written description of how to achieve a horizontal axis of plunger travel and an angled axis of plunger travel. This theory was not disclosed in Zurn's final invalidity and infringement contentions (*see* Ex. 95 at 4-6; Ex. 94 at 4-7), therefore Zurn should be precluded from raising it at this late stage in the proceedings. *See supra*, note 3. Zurn has repeatedly violated the local patent rules in the course of arguing its summary judgment position, and it has not offered any explanation or justification for doing so. If the local patent rules are to provide any meaningful direction at all in a litigation, the kind of "shifting sands" conduct employed by Zurn must not be rewarded. *Fujitsu Ltd.*, U.S. Dist. LEXIS 38740, at *25.

Zurn's primary written description argument, like its enablement argument, is based on the assumption that the Court will adopt Zurn's erroneous interpretation of "axis of plunger travel." However, by Zurn's own admission the *Wilson* patent specification would not provide an adequate written description of what Zurn contends is the claimed invention. Such a claim interpretation is wrong as a matter of law. *See* Sloan Br. at 8-9 (citing cases).

As an alternative argument, Zurn contends that, if the Court rejects Zurn's construction and adopts Sloan's, the specification would still not adequately describe the claimed invention as construed using Sloan's proposal because—according to Zurn—John Wilson "had no idea how the plunger travels" in his claimed invention. Zurn Resp. at 26. In support of its argument, Zurn cites to the following testimony from Mr. Wilson's October 18, 2012 deposition:

Q: When did you do this analysis for the plunger path?

A: The plunger path? It was during the development phase the travel was analyzed. As we progressed, there was a fixture made to measure the travel position in the fully-activated condition.

Q: Did you measure it anywhere in between fully actuated and resting?

A: No.

Q: So is it fair to say that you measured a point - - a resting point and a fully-actuated point, and those are the only two points that you measured in terms of plunger path?

A: During the development it was in the dormant position and the fully-activated position.

Ex. 98, Wilson Dep. 20:23-21:15, Oct. 18, 2012.

On its face, the above testimony does not establish that Mr. Wilson had “no idea” how the plunger travels in the claimed invention. *See* Sloan Resp. Stmt. ¶ 70. At most, the above passage suggests that, during one particular study of Sloan handles, Mr. Wilson measured the positional data of the plunger when it was at rest and when it was fully activated. For Zurn to infer from the above testimony that John Wilson, a professional design engineer who has worked for Sloan for more than 25 years and is the named inventor on more than 20 patents relating to flush valve technology (Wilson Aff. ¶ 1), has “no idea” how his invention works defies common sense. The evidence of record shows that John Wilson visually inspected plunger movement through use of a shadow graph (Ex. 98, Wilson Dep. 21:16-23:3), and he submitted, as part of his invention disclosure materials prepared prior to the filing of the patent application, a handle activation study plunger movement in X, Y, and Z directions due to tolerance. *See* Ex. 52 at SVC0004885. No reasonable jury could find for Zurn on its written description defense based on the limited evidence cited by Zurn, and judgment as a matter of law on this defense should be granted in favor of Sloan.

V. SLOAN IS ENTITLED TO SUMMARY JUDGMENT ON ZURN'S COUNTERCLAIMS AND AFFIRMATIVE DEFENSES THAT CLAIMS 1, 4-8, 10-11, 19, 28-31, AND 33-34 ARE INVALID UNDER §§ 102 OR 103.

Zurn does not dispute that it has not asserted anticipation or obviousness contentions against claims 1, 4-8, 10, 11, 19, 28-31, 33, and 34 of the *Wilson* patent. Zurn Resp. at 34. Zurn also does not dispute that its only expert witness on the subject of invalidity, Mr. Magee, expressed no opinion in his reports as to the anticipation and obviousness of any of claims 1, 4-8, 10, 11, 19, 28-31, 33, and 34. Despite this clear abandonment of these defenses, Zurn now makes the astonishing request that it should be granted leave to amend its invalidity contentions in the event that the Court rejects Zurn's erroneous claim interpretation of "axis of plunger travel." *Id.* at 35. Zurn's request comes much too late and without any basis.¹³

Whatever the reason may have been for Zurn to have omitted from its contentions and from its expert reports invalidity defenses against these claims, Zurn made a conscious decision to do so. Zurn's alleged excuse—that it would not have abandoned its invalidity defenses as to claims 1, 4-8, 10, 11, 19, 28-31, 33, and 34 if it had known about the possibility that "axis of plunger travel" could be construed to constitute only a portion of the plunger path—is undermined by the fact that Zurn removed its invalidity defenses as to claims 1, 4-8, 10, 11, 19, 28-31, 33, and 34 *after* the *Markman* hearing,¹⁴ which, as noted above, is where Zurn itself said that only a portion of the plunger travel path had to be a straight line. Zurn was clearly on notice that such a construction could be an issue in this case, and it voluntarily abandoned its anticipation and obviousness defenses knowing that. Nothing the Court or Sloan did required

¹³ Zurn identifies no procedural rule, local patent rule, or any other directive of this Court allowing Zurn to even make this request.

¹⁴ Zurn's most recent (2013) invalidity and unenforceability contentions include § 102 or § 103 invalidity contentions only as to claim 12 of the *Wilson* patent (*see* Ex. 95 at 3-4 (Dkt. 447)), whereas Zurn's 2012 invalidity and unenforceability contentions included § 102 or § 103 invalidity contentions as to *all* of the asserted claims 1, 4-8, 10-12, 14, 19, 29-31, and 33-34 (*see* Ex. 94 at 2-4).

Zurn to abandon those defenses, and Zurn does not contend that it was an oversight. Zurn does not dispute that it did not purposefully omit those defenses from its invalidity contentions and expert reports.

Zurn's request to revive its abandoned claim that prior art flush valves teach what the claims require, if granted at this late stage—after expert discovery has closed, and after Zurn's own expert testified that the prior art does *not* teach what the claims require—would unfairly prejudice Sloan by forcing it to react to Zurn's shifting defense strategy, would waste judicial resources, and without a doubt delay this case for many months.

Finally, Zurn's request to amend its contentions almost a full *year* after the *Markman* hearing cannot be reconciled with Zurn opposition, seven months ago, to Sloan's motion for leave to amend its contentions a relatively short time after Sloan learned of new information (Dkt. 451), which Zurn opposed by arguing that Sloan's delay of those *weeks* demonstrated a lack of diligence in seeking leave to do so and that such amendments would have unfairly prejudiced Zurn even before the close of discovery. *See* Dkt. 459 at 6-10. For the same reasons Zurn challenged Sloan's motion, Zurn's request here should be rejected. *See also supra*, note 3.

VI. CONCLUSION

For all of the foregoing reasons, and for the reasons stated in Sloan's additional summary judgment papers, Sloan respectfully respects that the Court grant Sloan's motion for summary judgment in its entirety, and deny Zurn's motion for summary judgment in its entirety.

Dated: August 9, 2013

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Jason A. Berta, an attorney, hereby certify that on August 9, 2013, I caused to be filed electronically PLAINTIFF'S REPLY MEMORANDUM OF LAW IN SUPPORT OF ITS MOTION FOR SUMMARY JUDGMENT, DECLARATION OF JASON A. BERTA IN SUPPORT OF SLOAN'S REPLY BRIEF, and supporting EXHIBITS, with the Clerk of the Court using the CM/ECF system, which will send an electronic copy of the foregoing to counsel of record and constitutes service under Federal Rule of Civil Procedure 5(b)(2)(D) pursuant to Local Rule 5.9 of the Northern District of Illinois.

/s/ Jason A. Berta